

Claims

- [c1] 1.A display device comprising:
 - a substrate;
 - a display unit disposed on the substrate; and
 - a passivation structure formed of an organic/inorganic film covering the display unit and the substrate; wherein an inner side, which is closer to the display unit, of the passivation structure has a higher organic/inorganic ratio than an outer side, which is farther from the display unit, and the organic/inorganic ratio gradually decreases from the inner side of the passivation structure toward the outer side of the passivation structure.
- [c2] 2.The display device of claim 1 wherein the display device is an organic light emitting display device.
- [c3] 3.The display device of claim 1 wherein the display unit is an organic light emitting display unit comprising an organic luminous layer composed of organic materials.
- [c4] 4.The display device of claim 1 wherein the inner side of the passivation structure has a higher organic/inorganic ratio to increase adhesion between the passivation structure and the display unit.

- [c5] 5.The display device of claim 1 wherein the outer side of the passivation structure has a lower organic/inorganic ratio to improve water repelling ability of the passivation structure.
- [c6] 6.The display device of claim 1 wherein the organic/in-organic film comprises materials composed of $\text{SiO}_{x-y}\text{C}_z\text{H}_w$, $\text{SiN}_{x-y}\text{C}_z\text{H}_w$, or $\text{SiO}_{w-x}\text{N}_y\text{C}_z\text{H}_w$ compounds.
- [c7] 7.The display device of claim 1 wherein a thickness of the passivation structure is in a range of 500 to 5000 angstroms.
- [c8] 8.The display device of claim 1 wherein the substrate is a glass substrate.
- [c9] 9.The display device of claim 1 wherein the display unit comprises a driving circuit disposed on the surface of the substrate.
- [c10] 10. The display device of claim 9 wherein the driving circuit is an active driving circuit and comprises a plurality of thin film transistors arranged in a matrix for driving the display unit to display images.
- [c11] 11.The display device of claim 1 wherein a transmittance of the passivation structure is in a range of 40 to 90%.

- [c12] 12.The display device of claim 11 wherein the light generated from the display unit transmits upward and passes through the passivation structure to display in a top emission mode.
- [c13] 13.The display device of claim 12 wherein the display device can display in a top emission and a bottom emission mode simultaneously.